



Serial No.: 10/075,747
Confirmation No.: 9474
Applicant: GROWCOCK et al.
Atty. Ref.: 11836.0703.NPUS00

AMENDMENTS TO THE CLAIMS:

IN THE CLAIMS:

Please amend the claims in the following manner:

1-24. (Canceled)

25. (Withdrawn): A method comprising biodegrading by vermicomposting drilling cuttings coated with a drilling fluid, wherein the drilling fluid formulation includes a linear paraffin having 11-18 carbon atoms, a non-oleaginous phase, and an emulsifying agent.

26. (Withdrawn): The method of claim 25 further comprising mixing the drilling cuttings with a compostable waste material so as to provide a compostable balance of nitrogen and carbon content.

27. (Withdrawn): The method of claim 25 wherein the nitrogen and carbon content have a ratio of about 2:1 to about 100:1.

28. (Withdrawn): The method of claim 25 wherein the nitrogen and carbon content have a ratio of about 25:1.

29. (Withdrawn): The method of claim 25 wherein the vermicomposting is carried out in a bioreactor from a bin vermicomposter, a rotating drum vermicomposter, windrows or combinations of these.

30. (Withdrawn): The method of claim 25 wherein the drilling fluid further includes a weighting agent.

31. (Withdrawn): The method of claim 25 wherein the non-oleaginous fluid is selected from fresh water, sea water, a brine containing organic or inorganic dissolved salts, a liquid containing water-miscible organic compounds, and combinations thereof.

32. (Withdrawn): The method of claim 25 wherein the emulsifying agent is a curic diglyceride.

33. (Withdrawn): A method for biodegrading drilling cuttings coated with a drilling fluid, the method comprising: exposing the drilling cuttings to a vermicomposting environment for a sufficient period of time to permit the worms to biodegrade the organic components of the drilling fluid.



Serial No.: 10/075,747

Confirmation No.: 9474

Applicant: GROWCOCK et al.

Atty. Ref.: 11836.0703.NPUS00

34. (Withdrawn): The method of claim 33 wherein the drilling fluid is formulated to include a linear paraffin having 11-18 carbon atoms, a non-oleaginous phase, and an emulsifying agent.

35. (Withdrawn): The method of claim 33 further comprising mixing the drilling cuttings with a compostable waste material so as to provide a compostable balance of nitrogen and carbon content.

36. (Withdrawn): The method of claim 33 wherein the nitrogen and carbon content have a ratio of about 2:1 to about 100:1.

37. (Withdrawn): The method of claim 33 wherein the nitrogen and carbon content have a ratio of about 25:1.

38. (Withdrawn): The method of claim 33 wherein the vermicomposting is carried out in a bioreactor selected from a bin vermicomposter, a rotating drum vermicomposter, windrows and combinations of these.

39. (Withdrawn): The method of claim 33 wherein the drilling fluid further includes a weighting agent.

40. (Withdrawn): The method of claim 33 wherein the non-oleaginous fluid is selected from fresh water sea water, a brine containing organic or inorganic dissolved salts, a liquid containing water-miscible organic compounds, and combinations thereof.

41. (Withdrawn): The method of claim 33 wherein the emulsifying agent is a euristic diglyceride.

42. (Withdrawn): A method of vermicular bio-remediation of oil contaminated solids, the method comprising providing the oil contaminated solids to a vermicular bioreactor, and allowing the worms within the vermicular bioreactor to biodegrade the oil contaminated solids.

43. (Withdrawn): The method of claim 42 wherein the drilling fluid is formulated to include a linear paraffin having 11-18 carbon atoms, a non-oleaginous phase, and an emulsifying agent.

44. (Withdrawn): The method of claim 42 further comprising mixing the drilling cuttings with a compostable waste material so as to provide a compostable balance of nitrogen and carbon content.



Serial No.: 10/075,747

Confirmation No.: 9474

Applicant: GROWCOCK et al.

Atty. Ref.: 11836.0703.NPUS00

45. (Withdrawn): The method of claim 42 wherein the nitrogen and carbon content have a ratio of about 2:1 to about 100:1.

46. (Withdrawn): The method of claim 42 wherein the nitrogen and carbon content have a ratio of about 25:1.

47. (Withdrawn): The method of claim 42 wherein the vermiculture bioreactor is selected from a bin vermicomposter, a rotating drum vermicomposter, windrows and combinations of these.

48. (Withdrawn): The method of claim 42 wherein the drilling fluid further includes a weighting agent.

49. (Withdrawn): The method of claim 42 wherein the drilling fluid further includes a fluid loss control agent.

50. (Withdrawn): The method of claim 42 wherein the non-oleaginous fluid is selected from fresh water, sea water, a brine containing organic or inorganic dissolved salts, a liquid containing water-miscible organic compounds, and combinations thereof.

51. (Withdrawn): The method of claim 42 wherein the emulsifying agent is a euristic diglyceride.

52. (Currently Amended): A vermiculture [[feed]] composition comprising: a plurality of worms, oil contaminated solids, a bulking agent, and a compostable nitrogen source, wherein the oil contaminated solids include solid material coated with an oleaginous phase composed of a linear paraffin having 11-18 carbon atoms, a non-oleaginous phase containing a salt of a biodegradable anion, and an emulsifying agent in a concentration capable of forming an invert emulsion suitable for use as a drilling fluid.

53. (Currently Amended): The [[vermiculture feed]] composition of claim 52 wherein the oil contaminated solids are selected from drill cuttings, drilling mud, oil contaminated soil, and combinations thereof.

54. (Currently Amended): The [[vermiculture feed]] composition of claim 52 wherein the bulking agent is selected from sawdust, wood shavings, rice hulls, canola husks, shredded newsprint/paper, shredded coconut hulls, cotton seed hulls, and mixtures of these.

new cited
Ritter et al.

581

4

1581

1581

worms
compostable N source



Serial No.: 10/075,747
Confirmation No.: 9474
Applicant: GROWCOCK et al.
Atty. Ref.: 11836.0703.NPUS00

✓ 55. (Currently Amended): The [[vermiculture feed]] composition of claim 52 wherein the compostable nitrogen source is selected from yard wastes, household wastes, farm wastes, food preparation wastes, food processing wastes, paunch material, rumen material, animal rendering wastes, sewage sludge, and mixtures of these. 1581

56. (Currently Amended): The [[vermiculture feed]] composition[[s]] of claim 52 wherein the composition[[s]] [[have]]has a carbon to nitrogen ratio of about 25:1 and a moisture content of about 75% by weight. 1581

57. (Currently Amended): The [[vermiculture feed]] composition[[s]] of claim 52 wherein the composition further includes pretreated or pre-composted materials. 1581

58. (Canceled)

59. (Original): A vermicast composition comprising vermicast and biodegraded drill cuttings. 1581

60. (New): A vermiculture composition comprising: a plurality of earth worms, oil contaminated solids, a bulking agent, and a compostable nitrogen source, wherein the oil contaminated solids include a linear paraffin, a non-oleaginous phase and an emulsifying agent.

✓ 61. (New): The vermiculture composition of claim 60 wherein oil contaminated solids are selected from drill cuttings, drilling mud, oil contaminated soil, and combinations thereof.

62. (New): The vermiculture composition of claim 60 wherein the nitrogen and carbon content has a ratio of about 2:1 to about 100:1.

63. (New): The vermiculture composition of claim 60 wherein the oil contaminated solids include an oleaginous phase substantially composed of linear paraffins, a non-oleaginous phase including a salt of a biodegradable anion, and a biodegradable emulsifying agent.

64. (New): A vermiculture feed composition comprising:

a) oil contaminated solids wherein the oil contaminated solids are selected from the group consisting of drill cuttings, drilling mud, oil contaminated soil, and combinations thereof, and wherein the oil contaminated solids include an oleaginous phase substantially composed of linear paraffins, a non-oleaginous phase including a salt of a biodegradable anion, and an emulsifying agent; 153 1581V 1294

b) a bulking agent; and 103



Serial No.: 10/075,747

Confirmation No.: 9474

Applicant: GROWCOCK et al.

Atty. Ref.: 11836.0703.NPUS00

c) a compostable nitrogen source.

65. (New): The vermiculture composition of claim 64 wherein the nitrogen and carbon content has a ratio of about 2:1 to about 100:1.
